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(21) International Application Number: PCT/US99/28613 (22) International Filing Date: 3 December 1999 (03.12.99) (30) Priority Data: 60/110,844 4 December 1998 (04.12.98) US (71) Applicant (for all designated States except US): YALE UNIVERSITY [US/US]; 451 College Street, New Haven, CT 06520 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): DEISSEROTH, Albert, P. [US/US]; Yale Cancer Center, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06520 (US). CHUNG, Injae [KR/US]; Yale Cancer Center, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06520 (US). ZHANG, Lixin [CN/US]; Yale Cancer Center, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06520 (US). (74) Agent: TUSCAN, Michael, S.; Morgan, Lewis & Bockius LLP, 1800 M St., NW, Washington, DC 20036 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: PLASTIN PROMOTER DIRECTED GENE THERAPY (57) Abstract The invention relates generally to the treatment of cancer using platin promoter directed gene therapy. The invention includes vectors and recombinant viruses in which a platin promotor is used to effect the expression of therapeutic transgenes in neoplastic but not in normal epithelial cells.		

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/28613

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A01N 43/04; A61K 31/70; C12N 15/63

US CL : 514/44; 435/320.1, 455, 456

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 514/44; 435/320.1, 455, 456

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

MEDLINE, NPL, WEST

search terms: L-plastin promoter, T-plastin promoter, human plastin, adenoviral vector, gene therapy, neoplastic, tumors

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Database Medline on STN, US National Library of Medicine, (Bethesda, MD, USA), Accession No. 97174306, LIN et al., 'The murine L-plastin gene promoter: identification and comparison with the human L-plastin gene promoter,' abstract, DNA and Cell Biology, January 1997, Vol. 16, No.1, pages 9-16, see entire abstract.	1-30
Y	Database Medline on STN, US National Library of Medicine, (Bethesda, MD, USA), Accession No. 93155096, LIN et al., 'Characterization of the human L-plastin gene promoter in normal and neoplastic cells,' abstract, Journal of Biological Chemistry, 05 February 1993, Vol. 268, No. 4, pages 2793-2801, see entire abstract.	1-30



Further documents are listed in the continuation of Box C.



See patent family annex.

Special categories of cited documents:	
A document defining the general state of the art which is not considered to be of particular relevance	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
B earlier document published on or after the international filing date	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation, or other special reason (as specified)	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
O document referring to an oral disclosure, use, exhibition or other means	*A* document member of the same patent family
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

17 JANUARY 2000

Date of mailing of the international search report

14 FEB 2000

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

JILL D. MARTIN

Telephone No. (703) 308-0196

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/28613

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WANG et al. Identification of Dioxin-Responsive Genes in Hep G2 Cells Using Differential mRNA Display RT-PCR. Biochemical and Biophysical Research Communications. 27 March 1996, Vol. 220, Issue 3, pages 784-788, see especially page 788.	1-30
A	US 5,360,715 A (LEAVITT et al) 01 November 1994, see entire document.	1-30
Y, P	Database Medline on STN, US National Library of Medicine, (Bethesda, MD, USA), Accession No. 1999210252, CHUNG, I. 'Use of L-plastin promoter to develop an adenoviral system that confers transgene expression in ovarian cancer cells but not in normal mesothelial cells,' abstract, Cancer Gene Therapy, March-April 1999, Vol. 6, No. 2, pages 99-106, see entire abstract.	1-30